Journal of Biomedical Materials Research (Applied Biomaterials) Author Index to Volume 58

Aarnts, M. See Dauvillier, B. S., 16
Afsar-Keshmiri, A. See Mabrey, J. D., 196
Agrawal, C. M. See Mabrey, J. D., 196; Yamashita, J., 47
Aitasalo, K. M. J. See Peltola, M. J., 54, 261
Albers, F. W. J. See Elving, G. J., 421; Leunisse, C., 556
Alea, A. D. See Nelson, P. A., 710
Allen, M.
—; Myer, B.; Rushton, N.: *In Vitro* and *In Vivo* Investigations into the Biocompatibility of Diamond-Like Carbon (DLC) Coatings for Orthopedic Applications, 319
Ambrad-Chalela, E. See Lyman, D. J., 221
Ambrosio, A. M. A.
—; Sahota, J. S.; Khan, Y.; Laurencin, C. T.: A Novel Amorphous Calcium Phosphate Polymer Ceramic for Bone Repair: I. Synthesis and Characterization, 295
An, Y. H. See Powers, D. L., 486
Anderson, G. I.
—; MacQuarrie, R.; Osinga, C.; Chen, Y. F.; Langman, M.; Gilbert, R.: Inhibition of Leukotriene Function Can Modulate Particulate-Induced Changes in Bone Cell Differentiation and Activity, 406
Anderson, J. M. See Wiggins, M. J., 302
Anissian, H. L.
—; Stark, A.; Good, V.; Dahlstrand, H.; Clarke, I. C.: The Wear Pattern in Metal-on-Metal Hip Prostheses, 673
Apel, J. See Schoof, H., 352
Aro, H. T. See Itälä, A. I., 679
Arola, D. D.
—; Yang, D. T.; Stoffel, K. A.: The Apparent Volume of Interdigitation: A New Parameter for Evaluating the Influence of Surface Topography on Mechanical Interlock, 519
Ashammakhi, N. See Kangas, J., 121
Atsuta, M. See Taira, Y., 216; Yoshida, K., 525
Augat, P. See Ignatius, A. A., 254, 701

Baba, N. See Taira, Y., 216
Baek, M. J. See Lee, W. K, 27
Baitner, A. See Frenkel, S. R., 645
Baker, M. A. See Massaro, C., 651
Balossier, G. See Laquerriere, P., 238
Baran, G. R. See McCool, J. I., 247
Barnett, P. I. See Howling, G. I., 415
Barritault, D. See Desgranges, P., 1
Barsun, S. See Zhao, W., 456
Bechtold, J. E. See Mouzin, O., 61
Behrend, B.
—; Guertsen, W.: Long-Term Effects of Four Extraction Media on the Fluoride Release from Four Polyacid-Modified Composite Resins (Compomers) and One Resin-Modified Glass-Ionomer Cement, 631
Bel, K. See van Wachem, P. B., 384
Bélanger, M.-C.
—; Marois, Y.: Hemocompatibility, Biocompatibility, Inflammatory and *in Vivo* Studies of Primary Reference Materials Low-Density Polyethylene and Polydimethylsiloxane: A Review, 467
Benson, L. C.
—; DesJardins, J. D.; LaBerge, M.: Effects of *In Vitro* Wear of Machined and Molded UHMWPE Tibial Inserts on TKR Kinematics, 496
Berndt, C. C. See Sun, L., 570
Betz, O. See Ignatius, A. A., 701
Blanchet, T. A.
—; Burroughs, B. R.: Numerical Oxidation Model for Gamma Radiation-Sterilized UHMWPE: Consideration of Dose-Depth Profile, 684
Boberick, K. G. See McCool, J. I., 247
Bonfield, W. See Harper, E. J., 216; Nazhat, S. N., 335
Bonhomme, P. See Laquerriere, P., 238
Bouchot, A. See Laquerriere, P., 238
Brescia, E. See Milella, E., 427
Brouwer, L. A. See van Wachem, P. B., 384
Bruno, V. See Milella, E., 427
Buma, P. See Verdonschot, N., 599
Bumrerraj, S. See Katz, J. L., 366
Burroughs, B. R. See Blanchet, T. A., 684
Buschmann, M. See Jarry, C., 127
Busscher, H. J. See Elving, G. J., 421; Leunisse, C., 556
Butler, C. E.
—; Navarro, F. A.; Orgill, D. P.: Reduction of Abdominal Adhesions Using Composite Collagen-GAG Implants for Ventral Hernia Repair, 75

Cahalan, P. T. See van Wachem, P. B., 384
Campbell, P. A. See Sathasivam, S., 282
Carpentier, G. See Desgranges, P., 1
Caruelle, J.-P. See Desgranges, P., 1
Cehnite, A. See Jarry, C., 127
Chaput, C. See Jarry, C., 127
Chen, S.-Y.
—; Liang, W.-M.; Yen, P.-S.: Reinforcement of Acrylic Denture Base Resin by Incorporation of Various Fibers, 203
Chen, Y. F. See Anderson, G. I., 406
Cho, K. H. See Kim, S. W., 108
Chow, L. C. See Takagi, S., 36
Chung, J. H See Kim, S. W., 108
Claes, L. E. See Dürselen, L., 666; Ignatius, A. A., 254, 564, 701
Clarke, I. C. See Anissian, H. L., 673
Coker, G. C. See Wallace, D. G., 545
Coker, G. T. See Hill, A., 308
Cordaro, N. M.
—; Weiss, J. A.; Szivek, J. A.: Strain Transfer between a CPC Coated Strain Gauge and Cortical Bone during Bending, 147
Cosentino, F. See Massaro, C., 651
Costantino, P. D. See Takagi, S., 36
Costello, J. See Fallen, C. T., 694
Crawford, G. See Fallen, C. T., 694
Cruise, G. See Hill, A., 308
Cruise, G. M. See Wallace, D. G., 545
Cuadrado, T. R. See Granados, D. L., 505

Dahlstrand, H. See Anissian, H. L., 673
Dauner, M. See Dürselen, L., 666
Dauvillier, B. S.
—; Hübsch, P. F.; Aarnts, M.; Feilzer, A. J.: Modeling of Viscoelastic Behavior of Dental Chemically Activated Resin Composites during Curing, 16
Davis, J. A. See Riley, R. G., 102
Deboni, M. C. Z. See Lavos-Valereto, I. C., 727
de Bruijn, J. D. See Yuan, H., 270
de Groot, K. See Yuan, H., 270
Della Valle, C. See Frenkel, S. R., 645
DeLustro, F. A. See Nelson, P. A., 710
Desgranges, P.
—; Caruelle, J.-P.; Carpentier, G.; Barritault, D.; Tardieu, M.: Beneficial Use of Fibroblast Growth Factor 2 and RGTA, a New Family of Heparan Mimics, for Endothelialization of PET Prostheses, 1
DesJardins, J. D. See Benson, L. C., 496
Dettmar, P. W. See Riley, R. G., 102
Dhert, W. J. A. See Nijhof, M. W., 747
Di Cesare, P. E. See Frenkel, S. R., 645
Dijk, F. See Leunisse, C., 556; van Wachem, P. B., 384
Dillon, L. D. See Zardiackas, L. D., 180
Di Paola, L. See Milella, E., 427
Dreyfuss, J. See Katz, J. L., 366

Journal of Biomedical Materials Research (Applied Biomaterials) Author Index to Volume 58

Aarnts, M. See Dauvillier, B. S., 16
Afsar-Keshmiri, A. See Mabrey, J. D., 196
Agrawal, C. M. See Mabrey, J. D., 196; Yamashita, J., 47
Aitasalo, K. M. J. See Peltola, M. J., 54, 261
Albers, F. W. J. See Elving, G. J., 421; Leunisse, C., 556
Alea, A. D. See Nelson, P. A., 710
Allen, M.
—; Myer, B.; Rushton, N.: *In Vitro* and *In Vivo* Investigations into the Biocompatibility of Diamond-Like Carbon (DLC) Coatings for Orthopedic Applications, 319
Ambrad-Chalela, E. See Lyman, D. J., 221
Ambrosio, A. M. A.
—; Sahota, J. S.; Khan, Y.; Laurencin, C. T.: A Novel Amorphous Calcium Phosphate Polymer Ceramic for Bone Repair: I. Synthesis and Characterization, 295
An, Y. H. See Powers, D. L., 486
Anderson, G. I.
—; MacQuarrie, R.; Osinga, C.; Chen, Y. F.; Langman, M.; Gilbert, R.: Inhibition of Leukotriene Function Can Modulate Particulate-Induced Changes in Bone Cell Differentiation and Activity, 406
Anderson, J. M. See Wiggins, M. J., 302
Anissian, H. L.
—; Stark, A.; Good, V.; Dahlstrand, H.; Clarke, I. C.: The Wear Pattern in Metal-on-Metal Hip Prostheses, 673
Apel, J. See Schoof, H., 352
Aro, H. T. See Itälä, A. I., 679
Arola, D. D.
—; Yang, D. T.; Stoffel, K. A.: The Apparent Volume of Interdigitation: A New Parameter for Evaluating the Influence of Surface Topography on Mechanical Interlock, 519
Ashammakhi, N. See Kangas, J., 121
Atsuta, M. See Taira, Y., 216; Yoshida, K., 525
Augat, P. See Ignatius, A. A., 254, 701

Baba, N. See Taira, Y., 216
Baek, M. J. See Lee, W. K, 27
Baitner, A. See Frenkel, S. R., 645
Baker, M. A. See Massaro, C., 651
Balossier, G. See Laquerriere, P., 238
Baran, G. R. See McCool, J. I., 247
Barnett, P. I. See Howling, G. I., 415
Barritault, D. See Desgranges, P., 1
Barsun, S. See Zhao, W., 456
Bechtold, J. E. See Mouzin, O., 61
Behrend, B.
—; Guertsen, W.: Long-Term Effects of Four Extraction Media on the Fluoride Release from Four Polyacid-Modified Composite Resins (Compomers) and One Resin-Modified Glass-Ionomer Cement, 631
Bel, K. See van Wachem, P. B., 384
Bélanger, M.-C.
—; Marois, Y.: Hemocompatibility, Biocompatibility, Inflammatory and *in Vivo* Studies of Primary Reference Materials Low-Density Polyethylene and Polydimethylsiloxane: A Review, 467
Benson, L. C.
—; DesJardins, J. D.; LaBerge, M.: Effects of *In Vitro* Wear of Machined and Molded UHMWPE Tibial Inserts on TKR Kinematics, 496
Berndt, C. C. See Sun, L., 570
Betz, O. See Ignatius, A. A., 701
Blanchet, T. A.
—; Burroughs, B. R.: Numerical Oxidation Model for Gamma Radiation-Sterilized UHMWPE: Consideration of Dose-Depth Profile, 684
Boberick, K. G. See McCool, J. I., 247
Bonfield, W. See Harper, E. J., 216; Nazhat, S. N., 335
Bonhomme, P. See Laquerriere, P., 238
Bouchot, A. See Laquerriere, P., 238
Brescia, E. See Milella, E., 427
Brouwer, L. A. See van Wachem, P. B., 384
Bruno, V. See Milella, E., 427
Buma, P. See Verdonschot, N., 599
Bumrerraj, S. See Katz, J. L., 366
Burroughs, B. R. See Blanchet, T. A., 684
Buschmann, M. See Jarry, C., 127
Busscher, H. J. See Elving, G. J., 421; Leunisse, C., 556
Butler, C. E.
—; Navarro, F. A.; Orgill, D. P.: Reduction of Abdominal Adhesions Using Composite Collagen-GAG Implants for Ventral Hernia Repair, 75

Cahalan, P. T. See van Wachem, P. B., 384
Campbell, P. A. See Sathasivam, S., 282
Carpentier, G. See Desgranges, P., 1
Caruelle, J.-P. See Desgranges, P., 1
Cehnite, A. See Jarry, C., 127
Chaput, C. See Jarry, C., 127
Chen, S.-Y.
—; Liang, W.-M.; Yen, P.-S.: Reinforcement of Acrylic Denture Base Resin by Incorporation of Various Fibers, 203
Chen, Y. F. See Anderson, G. I., 406
Cho, K. H. See Kim, S. W., 108
Chow, L. C. See Takagi, S., 36
Chung, J. H See Kim, S. W., 108
Claes, L. E. See Dürselen, L., 666; Ignatius, A. A., 254, 564, 701
Clarke, I. C. See Anissian, H. L., 673
Coker, G. C. See Wallace, D. G., 545
Coker, G. T. See Hill, A., 308
Cordaro, N. M.
—; Weiss, J. A.; Szivek, J. A.: Strain Transfer between a CPC Coated Strain Gauge and Cortical Bone during Bending, 147
Cosentino, F. See Massaro, C., 651
Costantino, P. D. See Takagi, S., 36
Costello, J. See Fallen, C. T., 694
Crawford, G. See Fallen, C. T., 694
Cruise, G. See Hill, A., 308
Cruise, G. M. See Wallace, D. G., 545
Cuadrado, T. R. See Granados, D. L., 505

Dahlstrand, H. See Anissian, H. L., 673
Dauner, M. See Dürselen, L., 666
Dauvillier, B. S.
—; Hübsch, P. F.; Aarnts, M.; Feilzer, A. J.: Modeling of Viscoelastic Behavior of Dental Chemically Activated Resin Composites during Curing, 16
Davis, J. A. See Riley, R. G., 102
Deboni, M. C. Z. See Lavos-Valereto, I. C., 727
de Bruijn, J. D. See Yuan, H., 270
de Groot, K. See Yuan, H., 270
Della Valle, C. See Frenkel, S. R., 645
DeLustro, F. A. See Nelson, P. A., 710
Desgranges, P.
—; Caruelle, J.-P.; Carpentier, G.; Barritault, D.; Tardieu, M.: Beneficial Use of Fibroblast Growth Factor 2 and RGTA, a New Family of Heparan Mimics, for Endothelialization of PET Prostheses, 1
DesJardins, J. D. See Benson, L. C., 496
Dettmar, P. W. See Riley, R. G., 102
Dhert, W. J. A. See Nijhof, M. W., 747
Di Cesare, P. E. See Frenkel, S. R., 645
Dijk, F. See Leunisse, C., 556; van Wachem, P. B., 384
Dillon, L. D. See Zardiackas, L. D., 180
Di Paola, L. See Milella, E., 427
Dreyfuss, J. See Katz, J. L., 366

Dunlop, D. G. See Griffon, D. J., 638
Duronio, J. See Wallace, D. G., 545
Dürselen, L.
—; Dauner, M.; Hierlemann, H.; Planck, H.; Claes, L. E.; Ignatius, A.: Resorbable Polymer Fibers for Ligament Augmentation, 666

Ebramzadeh, E. See Park, S.-H., 741
Egbert, B. See Hill, A., 308
Ekholm, C. See Itälä, A. I., 679
Elder, E. A. See Nelson, P. A., 710
Elstrodt, J. See van Wachem, P. B., 384
Elving, G. J.
—; van der Mei, H. C.; Busscher, H. J.; van Weissenbruch, R.; Albers, F. W. J.: Air-Flow Resistances of Silicone Rubber Voice Prostheses after Formation of Bacterial and Fungal Biofilms, 421
Endo, K. See Toba, T., 622
Estridge, T. See Wallace, D. G., 545
Estridge, T. D. See Hill, A., 308; Nelson, P. A., 710
Eun, H. C. See Kim, S. W., 108

Fallen, C. T.
—; Costello, J.; Crawford, G.; Schmidt, J. A.: Measuring the Elastic Properties of Fine Wire, 694
Feilzer, A. J. See Dauvillier, B. S., 16
Feng, L.-X. See Wang, D.-A., 372
Fischer, A. See Möller, D., 69
Fisher, J. See Howling, G. I., 415
Fleer, A. See Nijhof, M. W., 747
Fornasier, V. See Kamel, M., 88
Frayssinet, P. See Laquerriere, P., 238
Frenkel, S. R.
—; Jaffe, W. L.; Della Valle, C.; Jazrawi, L.; Maurer, S.; Baitner, A.; Wright, K.; Sala, D.; Hawkins, M.; Di Cesare, P. E.: The Effect of Alendronate (Fosamax™) and Implant Surface on Bone Integration and Remodeling in a Canine Model, 645
Friedman, C. D. See Takagi, S., 36
Fujishima, A. See Ohko, Y., 97
Fukuda, S. See Toba, T., 622
Furman, B. R. See Yamashita, J., 47

Ghazi, M. See Wataha, J. C., 537
Gilbert, R. See Anderson, G. I., 406
Gilchrist, T. See Griffon, D. J., 638
Good, V. See Anissian, H. L., 673
Granados, D. L.
—; Jiménez, A.; Cuadrado, T. R.: Assessment of Parameters Associated to the Risk of PVC Catheter Reuse, 505
Grandjean, A. See Laquerriere, P., 238
Gratzer, P. F.
—; Lee, J. M.: Control of pH Alters the Type of Cross-linking Produced by 1-Ethyl-3-(3-Dimethylaminopropyl)-Carbodiimide (EDC) Treatment of Acellular Matrix Vascular Grafts, 172
Grénman, R. See Stoor, P., 113
Griffey, S.
—; Schwade, N. D.; Wright, C. G.: Particulate Dermal Matrix as an Injectable Soft Tissue Replacement Material, 10
Griffon, D. J.
—; Dunlop, D. G.; Howie, C. R.; Gilchrist, T.; Salter, D. M.; Healy, D. M.: Early Dissolution of a Morsellised Impacted Silicate-Free Bioactive Glass in Metaphyseal Defects, 638
Gross, K. A. See Sun, L., 570
Guenounou, M. See Laquerriere, P., 238
Guertsen, W. See Behrend, B., 631

Haas, N. P. See Schmidmaier, G., 449
Haishima, Y.
—; Hayashi, Y.; Yagami, T.; Nakamura, A.: Elution of Bisphenol-A from Hemodialyzers Consisting of Polycarbonate and Polysulfone Resins, 209
Halloran, B. P. See Rabkin, B. A., 277
Hampson, F. See Riley, R. G., 102
Han, J.-D. See Im, G.-I., 531
Hardus, K. See Nijhof, M. W., 747
Harper, E. J.
—; Bonfield, W.: Errata: Tensile Characteristics of Ten Commercial Acrylic Bone Cements, 216
Hausmann, H. See Sodian, R., 401
Hawkins, M. See Frenkel, S. R., 645
Hawkins, R. See Powers, D. L., 486
Hayashi, Y. See Haishima, Y., 209
Healy, D. M. See Griffon, D. J., 638
Hench, L. L. See Jones, J. R., 720; Sepulveda, P., 734
Hendriks, M. See van Wachem, P. B., 384
Hendry, J. A.
—; Pilliar, R. M.: The Fretting Corrosion Resistance of PVD Surface-Modified Orthopedic Implant Alloys, 156
Heschel, I. See Schoof, H., 352
Hetzer, R. See Sodian, R., 401
Hierlemann, H. See Dürselen, L., 666
Higgs, R. J. E. D. See Higgs, W. A. J., 188
Higgs, W. A. J.
—; Lucksanasombool, P.; Higgs, R. J. E. D.; Swain, M. V.: A Simple Method of Determining the Modulus of Orthopedic Bone Cement, 188
Hill, A.
—; Estridge, T. D.; Maroney, M.; Monnet, E.; Egbert, B.; Cruise, G.; Coker, G. T.: Treatment of Suture Line Bleeding with a Novel Synthetic Surgical Sealant in a Canine Iliac PTFE Graft Model, 308
Hiltner, A. See Wiggins, M. J., 302
Hoerstrup, S. P. See Sodian, R., 401
Hori, Y. See Toba, T., 622
Howie, C. R. See Griffon, D. J., 638
Howling, G. I.
—; Barnett, P. I.; Tipper, J. L.; Stone, M. H.; Fisher, J.; Ingham, E.: Quantitative Characterization of Polyethylene Debris Isolated from Periprosthetic Tissue in Early Failure Knee Implants and Early and Late Failure Charnley Hip Implants, 415
Hrkach, J. S. See Lavik, E. B., 291
Hübsch, P. F. See Dauvillier, B. S., 16
Huiskes, R. See Verdonschot, N., 599

Ibanez, D. See Kamel, M., 88
Ida, H. See Kim, K. J., 393; Sasaki, K., 605
Ignatius, A. See Dürselen, L., 666
Ignatius, A. A.
—; Augat, P.; Ohnmacht, M.; Pokinskyj, P.; Kock, H.-J.; Claes, L. E.: A New Bioresorbable Polymer for Screw Augmentation in the Osteosynthesis of Osteoporotic Cancellous Bone: A Biomechanical Evaluation, 254
—; Betz, O.; Augat, P.; Claes, L. E.: *In Vivo* Investigations on Composites Made of Resorbable Ceramics and Poly(lactide) Used as Bone Graft Substitutes, 701
—; Ohnmacht, M.; Claes, L. E.; Kreidler, J.; Palm, F.: A Composite Polymer/Tricalcium Phosphate Membrane for Guided Bone Regeneration in Maxillofacial Surgery, 564
Ikada, Y. See Tomihata, K., 511
Im, G.-I.
—; Han, J.-D.: Suppressive Effects of Interleukin-4 and Interleukin-10 on the Production of Proinflammatory Cytokines Induced by Titanium-Alloy Particles, 531
Ingham, E. See Howling, G. I., 415
Ishii, M. See Kim, K. J., 393
Itälä, A. I.
—; Ylänen, H. O.; Ekholm, C.; Karlsson, K. H.; Aro, H. T.: Pore Diameter of More Than 100 μm Is Not Requisite for Bone Ingrowth in Rabbits, 679

Jaffe, W. L. See Frenkel, S. R., 645
Jallot, E. See Laquerriere, P., 238
Jan, C. M.
—; Nomura, Y.; Urabe, H.; Okazaki, M.; Shintani, H.: The Relationship Between Leachability of Polymerization Initiator and Degree of Conversion of Visible Light-Cured Resin, 42
Jarry, C.
—; Chaput, C.; Cehnite, A.; Renaud, M.-A.; Buschmann, M.; Leroux, J.-C.: Effects of Steam Sterilization on Thermogelling Chitosan-Based Gels, 127
Jazrawi, L. See Frenkel, S. R., 645
Ji, J. See Wang, D.-A., 372
Jiménez, A. See Granados, D. L., 505
Johnson, T. See Zhao, W., 456

Jones, J. R.
—; Sepulveda, P.; Hench, L. L.: Dose-Dependent Behavior of Bioactive Glass Dissolution, 720
—; See Sepulveda, P., 734
Ju, J. See Wallace, D. G., 545

Kadoya, Y. See Oonishi, H., 167
Kalidindi, S. R. See Nien, Y.-H., 137
Kamel, M.
—; Protzner, K.; Fornasier, V.; Peters, W.; Smith, D.; Ibanez, D.: The Peri-Implant Breast Capsule: An Immunophenotypic Study of Capsules Taken at Explantation Surgery, 88
Kangas, J.
—; Paasimaa, S.; Mäkelä, P.; Leppilahti, J.; Törmälä, P.; Waris, T.; Ashammakhi, N.: Comparison of Strength Properties of Poly-L/D-Lactide (PLDLA) 96/4 and Polyglyconate (Maxon®) Sutures: *In vitro*, in the Subcutis, and in the Achilles Tendon of Rabbits, 121
Karlsson, K. H. See Itälä, A. I., 679
Katz, J. L.
—; Bumrerraj, S.; Dreyfuss, J.; Wang, Y.; Spencer, P.: Micromechanics of the Dentin/Adhesive Interface, 366
Kellomäki, M. See Nazhat, S. N., 335
Kelly, G. See Riley, R. G., 102
Khan, Y. See Ambrosio, A. M. A., 295
Khor, E. See Yan, X.-L., 358
Kilian, L. See Laquerriere, P., 238
Kim, C.-W. See Lee, Y.-K., 613
Kim, H. J. See Kim, S. W., 108
Kim, H.-M. See Lee, W. K, 27
Kim, K. H. See Kim, S. W., 108
Kim, K. J.
—; Kotake, S.; Udagawa, N.; Ida, H.; Ishii, M.; Takei, I.; Kubo, T.; Takagi, M.: Osteoprotegerin Inhibits *in Vitro* Mouse Osteoclast Formation Induced by Joint Fluid from Failed Total Hip Arthroplasty, 393
Kim, K.-M.
—; Lee, J.-S.; Kim, K.-N.; Shin, S.-W.: Dimensional Changes of Dental Impression Materials by Thermal Changes, 217
Kim, K.-N. See Kim, K.-M., 217
Kim, S. H. See Lee, W. K, 27
Kim, S. W.
—; Park, K. C.; Kim, H. J.; Cho, K. H.; Chung, J. H; Kim, K. H.; Eun, H. C.; Lee, J. S.; Park, K. D.: Effects of Collagen IV and Laminin on the Reconstruction of Human Oral Mucosa, 108
Kim, Y. H. See Lee, W. K, 27
King, R. See Zhao, W., 456
Kinzl, L. See Sarkar, M. R., 329
Klitzman, B. See Ravin, A. G., 313
Klose, S. See Massaro, C., 651
Kobayakawa, K. See Ohko, Y., 97
Kobayashi, H.
—; Sekine, T.; Nakamura, T.; Shimizu, Y.: *In Vivo* Evaluation of a New Sealant Material on a Rat Lung Air Leak Model, 658
Kobayashi, M.
—; Toguchida, J.; Oka, M.: Development of the Shields for Tendon Injury Repair Using Polyvinyl Alcohol—Hydrogel (PVA-H), 344
Kock, H.-J. See Ignatius, A. A., 254
König, B., Jr. See Lavos-Valereto, I. C., 727
Konttinen, Y. T. See Sasaki, K., 605
Kors, G. See van Wachem, P. B., 384
Kotake, S. See Kim, K. J., 393
Kreidler, J. See Ignatius, A. A., 564
Kubo, T. See Kim, K. J., 393
Kubota, Y. See Ohko, Y., 97
Kucuk, A. See Sun, L., 570

LaBerge, M. See Benson, L. C., 496
Laippala, P. J. See Peltola, M. J., 54, 261
Langer, R. See Lavik, E. B., 291
Langman, M. See Anderson, G. I., 406
Laquerriere, P.
—; Kilian, L.; Bouchot, A.; Jallot, E.; Grandjean, A.; Guenounou, M.; Balossier, G.; Frayssinet, P.; Bonhomme, P.: Effect of Hydroxyapatite Sintering Temperature on Intracellular Ionic Concentrations of Monocytes: A TEM-Cryo-X-Ray Microanalysis Study, 238
La Sala, G. See Milella, E., 427
Laurencin, C. T. See Ambrosio, A. M. A., 295
Lavik, E. B.
—; Hrkach, J. S.; Lotan, N.; Nazarov, R.; Langer, R.: A Simple Synthetic Route to the Formation of a Block Copolymer of Poly(lactic-*co*-glycolic acid) and Polylysine for the Fabrication of Functionalized, Degradable Structures for Biomedical Applications, 291
Lavos-Valereto, I. C.
—; Wolynec, S.; Deboni, M. C. Z.; König, B., Jr.: *In Vitro* and *In vivo* Biocompatibility Testing of Ti-6Al-7Nb Alloy with and without Plasma-Sprayed Hydroxyapatite Coating, 727
Lee, J. E. See Lee, W. K, 27
Lee, J. M. See Gratzer, P. F., 172
Lee, J. S. See Kim, S. W., 108
Lee, J.-S. See Kim, K.-M., 217
Lee, W. K
—; Park, K. D.; Kim, Y. H.; Suh, H.; Park, J. C.; Lee, J. E.; Sun, K.; Baek, M. J.; Kim, H.-M.; Kim, S. H.: Improved Calcification Resistance and Biocompatibility of Tissue Patch Grafted with Sulfonated PEO or Heparin after Glutaraldehyde Fixation, 27
Lee, Y.-K.
—; Lim, B.-S.; Kim, C.-W.; Powers, J. M.: Color Characteristics of Low-Chroma and High-Translucence Dental Resin Composites by Different Measuring Modes, 613
Lemke, T. See Sodian, R., 401
Leppilahti, J. See Kangas, J., 121
Leroux, J.-C. See Jarry, C., 127
Leunisse, C.
—; van Weissenbruch, R.; Busscher, H. J.; van der Mei, H. C.; Dijk, F.; Albers, F. W. J.: Biofilm Formation and Design Features of Indwelling Silicone Rubber Tracheoesophageal Voice Prostheses—An Electron Microscopical Study, 556
Levin, L. S. See Ravin, A. G., 313
Liang, W.-M. See Chen, S.-Y., 203
Lim, B.-S. See Lee, Y.-K., 613
Lim, L.-Y. See Yan, X.-L., 358
Lin, S. See Zhao, W., 456
Lockwood, P. E. See Wataha, J. C., 537
Loebe, M. See Sodian, R., 401
Lotan, N. See Lavik, E. B., 291
Lucksanasombool, P. See Higgs, W. A. J., 188
Lyman, D. J.
—; Murray-Wijelath, J.; Ambrad-Chalela, E.; Wijelath, E. S.: Vascular Graft Healing. II. FTIR Analysis of Polyester Graft Samples from Implanted Bi-grafts, 221

Määttänen, H. S. See Peltola, M. J., 54
Mabrey, J. D.
—; Afsar-Keshmiri, A.; McClung, G. A., II; Pember, M. A., II; Wooldridge, T. M.; Agrawal, C. M.: Comparison of UHMWPE Particles in Synovial Fluid and Tissues from Failed THA, 196
MacQuarrie, R. See Anderson, G. I., 406
Magnissalis, E. A.
—; Xenakis, T. A.; Zacharis, C.: Wear of Retrieved Ceramic THA Components—Four Matched Pairs Retrieved after 5–15 Years in Service, 593
Mäkelä, P. See Kangas, J., 121
Mandelin, J. See Sasaki, K., 605
Markovic, M. See Takagi, S., 36
Marois, Y. See Bélanger, M.-C., 467
Maroney, M. See Hill, A., 308; Wallace, D. G., 545
Massaro, C.
—; Baker, M. A.; Cosentino, F.; Ramires, P. A.; Klose, S.; Milella, E.: Surface and Biological Evaluation of Hydroxyapatite-Based Coatings on Titanium Deposited by Different Techniques, 651
Masuda, S. See Oonishi, H., 167
Matsumoto, K. See Toba, T., 622
Matsumura, H. See Taira, Y., 216
Maurer, S. See Frenkel, S. R., 645

McClung, G. A., II See Mabrey, J. D., 196
McCool, J. I.
—; Boberick, K. G.; Baran, G. R.: Lifetime Predictions for Resin-Based Composites Using Cyclic and Dynamic Fatigue, 247
Meyer, R. See Sodian, R., 401
Milella, E.
—; Ramires, P. A.; Brescia, E.; La Sala, G.; Di Paola, L.; Bruno, V.: Physicochemical, Mechanical, and Biological Properties of Commercial Membranes for GTR, 427
—; See Massaro, C., 651
Mitchell, D. W. See Zardiackas, L. D., 180
Möller, D.
—; Reimers, W.; Pyzalla, A.; Fischer, A.: Residual Stresses in Coronary Artery Stents, 69
Monnet, E. See Hill, A., 308
Mouzin, O.
—; Søballe, K.; Bechtold, J. E.: Loading Improves Anchorage of Hydroxyapatite Implants More than Titanium Implants, 61
Murray-Wijelath, J. See Lyman, D. J., 221
Myer, B. See Allen, M., 319

Nakamura, A. See Haishima, Y., 209
Nakamura, T. See Kobayashi, H., 658; Toba, T., 622
Navarro, F. A. See Butler, C. E., 75
Nazarov, R. See Lavik, E. B., 291
Nazhat, S. N.
—; Kellomäki, M.; Törmälä, P.; Tanner, K. E.; Bonfield, W.: Dynamic Mechanical Characterization of Biodegradable Composites of Hydroxyapatite and Polylactides, 335
Nelson, P. A.
—; Powers, J. N.; Estridge, T. D.; Elder, E. A.; Alea, A. D.; Sidhu, P. K.; Sehl, L. C.; DeLustro, F. A.: Serological Analysis of Patients Treated with a New Surgical Hemostat Containing Bovine Proteins and Autologous Plasma, 710
Ngo, M. H. See Wallace, D. G., 545
Nien, Y.-H.
—; Kalidindi, S. R.; Siegler, S.: Fixation Strength of Swellable Bone Anchors in Low-Density Polyurethane Foam, 137
Nijhof, M. W.
—; Fleer, A.; Hardus, K.; Vogely, H. C.; Schouls, L. M.; Verbout, A. J.; Dhert, W. J. A.: Tobramycin-Containing Bone Cement and Systemic Cefazolin in a One-Stage Revision. Treatment of Infection in a Rabbit Model, 747
Niwa, C. See Ohko, Y., 97
Nomura, Y. See Jan, C. M., 42
Nunnery, L. A. See Zardiackas, L. D., 180

O'Dell, N. L. See Wataha, J. C., 537
Ogino, T. See Sasaki, K., 605
Ohara, T. See Sohmura, T., 478
Ohko, Y.
—; Utsumi, Y.; Niwa, C.; Tatsuma, T.; Kobayakawa, K.; Satoh, Y.; Kubota, Y.; Fujishima, A.: Self-Sterilizing and Self-Cleaning of Silicone Catheters Coated with TiO_2 Photocatalyst Thin Films: A Preclinical Work, 97
Ohnishi, K. See Toba, T., 622
Ohnmacht, M. See Ignatius, A. A., 254, 564
Oka, M. See Kobayashi, M., 344
Okazaki, M. See Jan, C. M., 42
Olbrich, K. C. See Ravin, A. G., 313
Oonishi, H.
—; Kadoya, Y.; Masuda, S.: Gamma-Irradiated Cross-Linked Polyethylene in Total Hip Replacements—Analysis of Retrieved Sockets after Long-Term Implantation, 167
Orgill, D. P. See Butler, C. E., 75
Osinga, C. See Anderson, G. I., 406

Paasimaa, S. See Kangas, J., 121
Palm, F. See Ignatius, A. A., 564
Park, J. C. See Lee, W. K, 27
Park, J.-S. See Park, S.-H., 741
Park, K. C. See Kim, S. W., 108
Park, K. D. See Kim, S. W., 108; Lee, W. K, 27
Park, S.-H.
—; Silva, M.; Park, J.-S.; Ebramzadeh, E.; Schmalzried, T. P.: Cement–Cement Interface Strength: Influence of Time to Apposition, 741
Parsell, D. E. See Zardiackas, L. D., 180
Patka, P. See Sarkar, M. R., 329
Peltola, M. J.
—; Aitasalo, K. M. J.; Suonpää, J. T. K.; Yli-Urpo, A.; Laippala, P. J.: *In Vivo* Model for Frontal Sinus and Calvarial Bone Defect Obliteration with Bioactive Glass S53P4 and Hydroxyapatite, 261
—; Suonpää, J. T. K.; Määttänen, H. S.; Varpula, M. J.; Aitasalo, K. M. J.; Yli-Urpo, A.; Laippala, P. J.: Clinical Follow-Up Method for Frontal Sinus Obliteration with Bioactive Glass S53P4, 54
Pember, M. A., II See Mabrey, J. D., 196
Peters, W. See Kamel, M., 88
Pietrabissa, R. See Raimondi, M. T., 436
Pietrzak, W. S. See Powers, D. L., 486
Pilliar, R. M. See Hendry, J. A., 156
Planck, H. See Dürselen, L., 666
Poggie, R. See Zardiackas, L. D., 180
Pokinskyj, P. See Ignatius, A. A., 254
Potapov, E. V. See Sodian, R., 401
Powers, D. L.
—; Sonawala, M.; Woolf, S. K.; An, Y. H.; Hawkins, R.; Pietrzak, W. S.: Comparison of the Biomechanics and Histology of Two Soft-Tissue Fixators Composed of Bioabsorbable Copolymers, 486
Powers, J. M. See Lee, Y.-K., 613
Powers, J. N. See Nelson, P. A., 710
Prior, J. J. See Wallace, D. G., 545
Protzner, K. See Kamel, M., 88
Pyzalla, A. See Möller, D., 69

Quinn, J. B. See Xu, H. H. K., 81

Rabkin, B. A.
—; Szivek, J. A.; Schonfeld, J. E.; Halloran, B. P.: Long-Term Measurement of Bone Strain *in vivo:* The Rat Tibia, 277
Raimondi, M. T.
—; Vena, P.; Pietrabissa, R.: Quantitative Evaluation of the Prosthetic Head Damage Induced by Microscopic Third-Body Particles in Total Hip Replacement, 436
Ramani, K. See Zhao, W., 456
Ramires, P. A. See Massaro, C., 651; Milella, E., 427
Raschke, M. See Schmidmaier, G., 449
Rau, G. See Schoof, H., 352
Ravin, A. G.
—; Olbrich, K. C.; Levin, L. S.; Usala, A.-L.; Klitzman, B.: Long- and Short-Term Effects of Biological Hydrogels on Capsule Microvascular Density around Implants in Rats, 313
Rawls, H. R. See Yamashita, J., 47
Rayner, K. See Sathasivam, S., 282
Reimers, W. See Möller, D., 69
Renaud, M.-A. See Jarry, C., 127
Rhee, W. M. See Wallace, D. G., 545
Riley, R. G.
—; Smart, J. D.; Tsibouklis, J.; Davis, J. A.; Kelly, G.; Hampson, F.; Dettmar, P. W.; Wilber, W. R.: Synthesis of Radiolabeled Congeners of the Carbomers: ^{14}C-Labeled Poly(acrylic acid)s, 102
Rushton, N. See Allen, M., 319

Sahota, J. S. See Ambrosio, A. M. A., 295
Sala, D. See Frenkel, S. R., 645
Salter, D. M. See Griffon, D. J., 638
Santavirta, S. See Sasaki, K., 605
Sarkar, M. R.
—; Wachter, N.; Patka, P.; Kinzl, L.: First Histological Observations on the Incorporation of a Novel Calcium Phosphate Bone Substitute Material in Human Cancellous Bone, 329
Sasaki, K.
—; Takagi, M.; Mandelin, J.; Takei, I.; Santavirta, S.; Ida, H.; Ogino, T.; Konttinen, Y. T.: Quantitative Analysis of mRNA Expression of TIMPs in the Periprosthetic Interface Tissue of Loose Hips by Real-Time PCR System, 605
Sathasivam, S.
—; Walker, P. S.; Campbell, P. A.; Rayner, K.: The Effect of Contact Area on Wear in Relation to Fixed Bearing and Mobile Bearing Knee Replacements, 282

Satoh, Y. See Ohko, Y., 97
Schmalzried, T. P. See Park, S.-H., 741
Schmidmaier, G.
—; Wildemann, B.; Stemberger, A.; Haas, N. P.; Raschke, M.: Biodegradable Poly(D,L-Lactide) Coating of Implants for Continuous Release of Growth Factors, 449
Schmidt, J. A. See Fallen, C. T., 694
Schonfeld, J. E. See Rabkin, B. A., 277
Schoof, H.
—; Apel, J.; Heschel, I.; Rau, G.: Control of Pore Structure and Size in Freeze-Dried Collagen Sponges, 352
Schouls, L. M. See Nijhof, M. W., 747
Schreurs, B. W. See Verdonschot, N., 599
Schroeder, J. A. See Wallace, D. G., 545
Schwade, N. D. See Griffey, S., 10
Sehl, L. C. See Nelson, P. A., 710
Sekine, T. See Kobayashi, H., 658
Sepulveda, P.
—; Jones, J. R.; Hench, L. L.: Characterization of Melt-Derived 45S5 and sol-gel–derived 58S Bioactive Glasses, 734
—; See Jones, J. R., 720
Shimizu, Y. See Kobayashi, H., 658; Toba, T., 622
Shin, S.-W. See Kim, K.-M., 217
Shintani, H. See Jan, C. M., 42
Sidhu, P. K. See Nelson, P. A., 710
Siegler, S. See Nien, Y.-H., 137
Silva, M. See Park, S.-H., 741
Singh, B. B. See Wataha, J. C., 537
Slooff, T. J. J. H. See Verdonschot, N., 599
Smart, J. D. See Riley, R. G., 102
Smith, D. See Kamel, M., 88
Søballe, K. See Mouzin, O., 61
Söderling, E. See Stoor, P., 113
Sodian, R.
—; Lemke, T.; Loebe, M.; Hoerstrup, S. P.; Potapov, E. V.; Hausmann, H.; Meyer, R.; Hetzer, R.: New Pulsatile Bioreactor for Fabrication of Tissue-Engineered Patches, 401
Sohmura, T.
—; Tamasaki, H.; Ohara, T.; Takahashi, J.: Calcium-Phosphate Surface Coating by Casting to Improve Bioactivity of Titanium, 478
Sonawala, M. See Powers, D. L., 486
Spencer, P. See Katz, J. L., 366
Stark, A. See Anissian, H. L., 673
Stemberger, A. See Schmidmaier, G., 449
Stoffel, K. A. See Arola, D. D., 519
Stone, M. H. See Howling, G. I., 415
Stoor, P.
—; Söderling, E.; Grénman, R.: Bioactive Glass S53P4 in Repair of Septal Perforations and Its Interactions with the Respiratory Infection-Associated Microorganisms *Heamophilus influenzae* and *Streptococcus pneumoniae*, 113
Suh, H. See Lee, W. K., 27
Sun, K. See Lee, W. K., 27
Sun, L.
—; Berndt, C. C.; Gross, K. A.; Kucuk, A.: Material Fundamentals and Clinical Performance of Plasma-Sprayed Hydroxyapatite Coatings: A Review, 570
Sun, Y.-H. See Wang, D.-A., 372
Suonpää, J. T. K. See Peltola, M. J., 54, 261
Suzuki, M. See Tomihata, K., 511
Swain, M. V. See Higgs, W. A. J., 188
Szivek, J. A. See Cordaro, N. M., 147; Rabkin, B. A., 277

Taira, Y.
—; Baba, N.; Yoshida, K.; Matsumura, H.; Atsuta, M.: Errata: A Study on Cytochrome c Oxidoreductase for Bonding a Tri-*n*-bultylborane-Initiated Luting Agent to Dentin, 216
Takagi, M. See Kim, K. J., 393; Sasaki, K., 605
Takagi, S.
—; Chow, L. C.; Markovic, M.; Friedman, C. D.; Costantino, P. D.: Morphological and Phase Characterizations of Retrieved Calcium Phosphate Cement Implants, 36
Takahashi, J. See Sohmura, T., 478
Takei, I. See Kim, K. J., 393; Sasaki, K., 605
Tamasaki, H. See Sohmura, T., 478
Tanagawa, M. See Yoshida, K., 525
Tanner, K. E. See Nazhat, S. N., 335
Tardieu, M. See Desgranges, P., 1
Tatsuma, T. See Ohko, Y., 97
Tesk, J. A.
—; Special Report: NIST Workshop on Reference Data for the Properties of Biomaterials, 463
Tipper, J. L. See Howling, G. I., 415
Toba, T.
—; Nakamura, T.; Shimizu, Y.; Matsumoto, K.; Ohnishi, K.; Fukuda, S.; Yoshitani, M.; Ueda, H.; Hori, Y.; Endo, K.: Regeneration of Canine Peroneal Nerve with the Use of a Polyglycolic Acid–Collagen Tube Filled with Laminin-Soaked Collagen Sponge: A Comparative Study of Collagen Sponge and Collagen Fibers as Filling Materials for Nerve Conduits, 622
Toguchida, J. See Kobayashi, M., 344
Tomihata, K.
—; Suzuki, M.; Ikada, Y.: The pH Dependence of Monofilament Sutures on Hydrolytic Degradation, 511
Törmälä, P. See Kangas, J., 121; Nazhat, S. N., 335
Tsibouklis, J. See Riley, R. G., 102

Udagawa, N. See Kim, K. J., 393
Ueda, H. See Toba, T., 622
Urabe, H. See Jan, C. M., 42
Usala, A.-L. See Ravin, A. G., 313
Utsumi, Y. See Ohko, Y., 97

van Blitterswijk, C. A. See Yuan, H., 270
van der Mei, H. C. See Elving, G. J., 421; Leunisse, C., 556
van Hal, C. T. H. See Verdonschot, N., 599
van Luyn, M. J. A. See van Wachem, P. B., 384
van Wachem, P. B.
—; Brouwer, L. A.; Kors, G.; Dijk, F.; Bel, K.; Elstrodt, J.; van Wijk, F.; Cahalan, P. T.; Hendriks, M.; van Luyn, M. J. A.: Animal Study on Surface-Modified Defibrillator Systems: Indications for Enhanced Infection Resistance, 384
van Weissenbruch, R. See Elving, G. J., 421; Leunisse, C., 556
van Wijk, F. See van Wachem, P. B., 384
Varpula, M. J. See Peltola, M. J., 54
Vena, P. See Raimondi, M. T., 436
Verbout, A. J. See Nijhof, M. W., 747
Verdonschot, N.
—; van Hal, C. T. H.; Schreurs, B. W.; Buma, P.; Huiskes, R.; Slooff, T. J. J. H.: Time-Dependent Mechanical Properties of HA/TCP Particles in Relation to Morsellized Bone Grafts for Use in Impaction Grafting, 599
Vogely, H. C. See Nijhof, M. W., 747

Wachter, N. See Sarkar, M. R., 329
Walker, P. S. See Sathasivam, S., 282
Wallace, D. G.
—; Cruise, G. M.; Rhee, W. M.; Schroeder, J. A.; Prior, J. J.; Ju, J.; Maroney, M.; Duronio, J.; Ngo, M. H.; Estridge, T.; Coker, G. C.: A Tissue Sealant Based on Reactive Multifunctional Polyethylene Glycol, 545
Wang, D.-A.
—; Ji, J.; Sun, Y.-H.; Yu, G.-H.; Feng, L.-X.: Blends of Stearyl Poly(Ethylene Oxide) Coupling-Polymer in Chitosan as Coating Materials for Polyurethane Intravascular Catheters, 372
Wang, X. See Yamashita, J., 47
Wang, Y. See Katz, J. L., 366
Waris, T. See Kangas, J., 121
Wataha, J. C.
—; O'Dell, N. L.; Singh, B. B.; Ghazi, M.; Whitford, G. M.; Lockwood, P. E.: Relating Nickel-Induced Tissue Inflammation to Nickel Release *in vivo*, 537
Weiss, J. A. See Cordaro, N. M., 147
Whitford, G. M. See Wataha, J. C., 537
Wiggins, M. J.
—; Wilkoff, B.; Anderson, J. M.; Hiltner, A.: Biodegradation of Polyether Polyurethane Inner Insulation in Bipolar Pacemaker Leads, 302
Wijelath, E. S. See Lyman, D. J., 221

Wilber, W. R. See Riley, R. G., 102
Wildemann, B. See Schmidmaier, G., 449
Wilkoff, B. See Wiggins, M. J., 302
Wolynec, S. See Lavos-Valereto, I. C., 727
Wooldridge, T. M. See Mabrey, J. D., 196
Woolf, S. K. See Powers, D. L., 486
Wright, C. G. See Griffey, S., 10
Wright, K. See Frenkel, S. R., 645

Xenakis, T. A. See Magnissalis, E. A., 593
Xu, H. H. K.
—; Quinn, J. B.: Effect of Silicon Carbide Whisker-Silica Heat Treatment on the Reinforcement of Dental Resin Composites, 81

Yagami, T. See Haishima, Y., 209
Yamashita, J.
—; Furman, B. R.; Rawls, H. R.; Wang, X.; Agrawal, C. M.: The Use of Dynamic Mechanical Analysis to Assess the Viscoelastic Properties of Human Cortical Bone, 47
Yan, X.-L.
—; Khor, E.; Lim, L.-Y.: Chitosan-Alginate Films Prepared with Chitosans of Different Molecular Weights, 358
Yang, D. T. See Arola, D. D., 519
Yen, P.-S. See Chen, S.-Y., 203
Ylänen, H. O. See Itälä, A. I., 679
Yli-Urpo, A. See Peltola, M. J., 54, 261
Yoshida, K.
—; Tanagawa, M.; Atsuta, M.: Effects of Filler Composition and Surface Treatment on the Characteristics of Opaque Resin Composites, 525
—; See Taira, Y., 216
Yoshitani, M. See Toba, T., 622
Yu, G.-H. See Wang, D.-A., 372
Yuan, H.
—; de Bruijn, J. D.; Zhang, X.; van Blitterswijk, C. A.; de Groot, K.: Bone Induction by Porous Glass Ceramic Made from Bioglass® (45S5), 270

Zacharis, C. See Magnissalis, E. A., 593
Zardiackas, L. D.
—; Parsell, D. E.; Dillon, L. D.; Mitchell, D. W.; Nunnery, L. A.; Poggie, R.: Structure, Metallurgy, and Mechanical Properties of a Porous Tantalum Foam, 180
Zhang, X. See Yuan, H., 270
Zhao, W.
—; Barsun, S.; Ramani, K.; Johnson, T.; King, R.; Lin, S.: Development of PMMA-Precoating Metal Prostheses via Injection Molding: Residual Stresses, 456

Journal of Biomedical Materials Research (Applied Biomaterials) Subject Index to Volume 58

Abdominal wall integrity, 75
Absorbable suture, 511
Accelerated aging, 684
Achilles tendon, 121
Acoustic impedance, 366
Acrylic acid, 102
Acrylic resin, 203
Adhesion, 75, 113, 344
Air-flow, 421
Albumin-based hydrogel, 658
Alendronate, 645
Allograft, 10
Alumina, 593
Angiogenesis, 313
Animal model, 747
Antibiotics, 384
Antibodies, 710
Anticollagen, 710
Anti-Factor V, 710
Anti-infection, 384
Anti-inflammatory cytokine, 531
Antithrombin, 710
Artery, 545
Arthroplasty infection, 747
Artificial nerve, 622
Autologous patch-tissue development, 401

Bacterial strain, 421
Basement membrane, 108
BG, 261
Biaxial flexure, 188
Bioabsorbable, 486
Bioactive glass, 54, 113, 638, 734
Bioactive glasses, 720
Biocompatibility, 308, 319, 372, 467, 478
Biodegradable coating, 449
Biodegradation, 302, 545
Biofilm, 421, 556
Biomaterials, 449
Biomechanics, 486
Bioprostheses, 172
Bioresorbable, 295
Bisphenol-A, 209
Bond strength, 525
Bone, 147
Bone cement, 188, 519
Bone defect, 329
Bone defects, 638
Bone growth, 570, 645
Bone ingrowth, 679
Bone repair, 295
Bone resorbing cytokines, 393
Bone scaffold, 180
Bone substitute materials, 701
Bovine pericardium tissue patch, 27
Burst pressure measurement, 658

Calcification, 27
Calcium phosphate cement, 329
Calcium phosphate cement implant, 36
Calcium phosphate-based biomaterials, 270
Canine model, 645
Capsule formation, 313
Carbodiimides, 172
Carbonated hydroxyapatite, 36
Carbopol, 102
Casting, 478
Catheter, 505
Catheter reprocessing, 505
Cell growth, 727
Cement–cement interface, 741
Cementing technique, 741
Ceramic implants, 593
Ceramic whisker, 81
Ceramics, 701
Characterization, 196
Chitosan, 127, 372
Chitosan-alginate PEC film, 358
^{14}C-label, 102
Clinical follow-up method, 54
Coating, 319, 372
Collagen, 172
Collagen fiber, 622
Collagen sponge, 352, 622
Collagen-glycosaminoglycan (CG) matrices, 75
Color difference, 613
Color measuring mode, 613
Compomer, 631
Composite, 295, 564, 701
Composites, 247
Copolymer, 486
Coronary stents, 69
Cortical bone, 47
Coupling, 291
Coupling-polymer, 372
CPC characterization, 36
Crack propagation, 247
Crimping, 69
Crosslinking, 684
Cryo-X-ray microanalysis, 238
Cytotoxicity, 27, 358

3-D scaffold, 295
Databases, 463
Defibrillators, 384
Degradable barrier membranes, 427
Degradable block copolymer, 291
Degradable composites, 335
Degree of conversion, 42
Dental resin composites, 16
Dental restorative material, 81
Dentin/adhesive interface, 366
Deterioration, 556
Device life, 556
Diamond-like carbon, 319
Dicalcium phosphate anhydrous, 36
Differential scanning calorimetry, 335
Differentiation, 406
Dilatation, 69
Dimensional change, 217
Dissolution, 720
DMA, 47
Dog test, 727
Dose dependency, 720
Drug delivery, 449
Dynamic mechanical analysis, 335

EDC, 172
Elastic modulus, 366
Endocrine disruptor, 209
Endothelialization, 1
Esterase, 631
Expansion-fit mechanism, 137

Fatigue, 247
FEA, 456
FGF2, 1
Fiber, ligament augmentation, 666
Filler composition, 525
Finite element analysis, 147
Finite element model, 436
Fixation strength, 137
Fluoride release, 631

Foreign body response, 313
Freeze-drying, 352
Fretting wear, 156
Frontal sinus obliteration, 261
FTIR-ATR, 221

Glass ceramic, 270
Glass fiber, 203
Glass-ionomer cement, 188, 631
Growth factors, 449
Guided bone regeneration, 564
Guided tissue regeneration, 427

HA, 261
Haemophilus influenzae, 113
Healing, 221
Heat-treatment, 81
Hemocompatibility, 467
Hemodialyzer, 209
Heparan mimics, 1
Heparin, 1
Heparinization, 384
Hip prosthesis, 436
Hip-joint simulator, 673
Human, 10
Human histology, 329
Hydrogel, 127
Hydrogel matrix, 313
Hydrolysis, 511
Hydroxyapatite, 61, 335, 478, 651, 727
Hydroxyapatite coating, 570
Hydroxyapatite particles, 238

ICI 230487, 406
Immunohistochemistry, 88
Impact strength, 203
Impaction grafting, 638
Implant, 61, 313
Implant failure, 88
Implant fixation, 570
Implant interface, 645
Implantation, 456
Implants, 537, 673
Impression materials, 217
In vitro degradation, 511, 564
In vivo biocompatibility, 701
In vivo studies, 467
In vivo wear, 593
Inflammatory response, 467
Injectable collagen matrix, 10
Interdigitation, 519
Interface, 61
Interleukin-4, 531
Interleukin-6, 531
Interleukin-10, 531

Joint prostheses, 684

Kevlar fiber, 203
Kinematics, 496
[K]/[Na], 238
Knee simulators, 282

Laminin, 108, 622
Laryngectomy, 556
Laser ablation, 537
Leachability, 42
Leukotriene, 406
Lifetime prediction, 247
Ligament, 486
5-lipoxygenase inhibitor, 406
Load, 61
Loosening, 393
Loss tangent, 47
Low-density polyethylene, 467
Lung air leak, 658
Lysine, 291

Matrix proteins, 221
Maxon®, 121
Mechanical interlock, 519
Mechanical properties, 525
Mechanical properties of bone scaffold, 180
Mechanical strain, 277
Mechanical testing, 599, 645
Mechanics, 16
Melting, 734
Metal ion oxidation, 302
Metal-on-metal prosthesis, 673
Microbiology, 127
Microsphere, 295
Mobile bearing knees, 282
Modeling, 16
Modular implants, 156
Modulus, 188
Moisture, 47
Molecular weight, 358
Monofilament suture, 511
Morphology, 427
Morsellised graft, 638
MP35N, 694
μ Raman, 366
Mucoadhesion, 102
Mucosa equivalent, 108

Nitrogen sorption, 734
Noncrystalline calcium phosphate, 295

One-stage revision, 747
Opaque resin composite, 525
Orthopedic implant, 570
Osteoblast, 319, 406
Osteoblastic-like cells, 727
Osteoclast, 406
Osteoconduction, 270
Osteoinduction, 270
Osteolysis, 393, 531, 605
Osteoporosis, 254
Osteoprotegerin (OPG), 393
Oxidation, 684

Pacemaker lead, 302
Particle size, 734
Particles, 531
Peri-implant capsule, 88
Peripheral nerve regeneration, 622
Permeability, 427
Persistence, 10
Plasma spray, 570, 651
Polariscope, 456
Poly(acrylic acid), 102
Polycarbonate, 209
Polydimethylsiloxane, 467
Poly(D,L-lactide), 449
Polyester fiber, 203
Polyethylene glycol, 308, 545
Polyethylene terephthalate, 221
Polyethylene wear, 282
Polylactic acid, 335
Polylactide, 121
Poly(lactide), 701
Poly(lactide), α-tricalcium phosphate, 564
Poly(L-lactide), 666
Poly(L-lactide-co-glycolide), 666
Polymerization initiator, 42
Polymethylmethacrylate, 188, 254
Polysulfone, 209
Polyurethane, 302
Polyvinyl alcohol hydrogel (PVA-H), 344
Poly(vinyl chloride), 505
Pore size, 679
Pore structure, 352
Porous metal, 180
Porous tantalum, 180
Primary reference materials, 467
Properties of biomaterials, 463
Prospective study, 329
Prostheses, 1
Prosthesis, 519
Prosthetic head, 436
Prosthetic loosening, 605
Pulsatile flow system, 401

Quantitative reverse transcription-polymerase chain reaction (quantitative RT-PCR), 605

Rabbit, 679
Radiation sterilization, 684

Rat model, 658
Reconstructive surgery, 75
Reference data, 463
Region of interest, 54
Reinforcement, 81
Relative modulus, 335
Residual stress, 456
Residual stresses, 69
Resin composite, 81, 613
Resin modified, 631
Resorbable bone substitute, 329
Resorbable membranes, 564
Resorbable polymer, 254, 666
Resorption, 406, 570
Retrieval analysis, 593
Reuse risk factors, 505
Revision, 599
RGTA, 1
Run-in phase, 673

Scanning acoustic microscopy, 366
Scanning electron microscopy, 679
Scission, 684
Screw augmentation, 254
Sealant, 545
Self-cleaning, 97
Self-hardening calcium phosphate cement, 36
Self-sterilizing, 97
Septal perforation, 113
Shear modulus, 694
Shield of tendon repair, 344
Shrinkage stress, 16
Silane treatment, 525
Silicone catheters, 97
Simulated linear shrinkage, 217
Single grain measurements, 69
Sinus obliteration, 54
Soft tissue fixation, 486
Soft tissue implantation, 270
Soft tissue replacement, 10
Sol-gel, 651, 734
Sputtering, 651
304 SS, 694
Stability, 27
Steady-state phase, 673
Sterilization, 127
Strain, 694
Strain gage, 456
Strain gauge, 147
Strain measurement, 147
Strength, 81
Streptococcus pneumoniae, 113
Structural properties of bone scaffold, 180
Subcutaneous implant, 545
Succinimidyl ester, 545
Sulfonated PEO or heparin grafting, 27
Surface coating, 478
Surface modification, 156, 372, 384
Surface morphology, 358
Surface oxidation, 167
Surface roughness, 519
Surgery, 545
Surgical sealant, 308
Survival, 247
Suture, 121
Swellable bone anchors, 137
Synovial fluid, 196
Synovial nutrition, 344
Synthesis, 291
Systemic antibiotic, 747

Temperature sensitivity, 127
Tendon repair, 121, 344
Tensile and bending stresses, 97
Tetracalcium phosphate, 36
Thermal change, 217
Thermal expansion coefficient, 217
Thiol, 545
Third-body abrasion, 436
Ti-6Al-7Nb dental implants, 727
TiO_2 photocatalyst, 97
Tissue engineering, 352, 401
Tissue inhibitor metalloproteinases (TIMP), 605
Tissue, metal ions, 537
Tissue reactions, 261, 467
Tissue sealant, 658
Titanium, 61, 478
Titanium alloy, 531
Titanium alloys, 156
Titanium dioxide, 525
Titanium implants, 679
Tobramycin-containing bone cement, 747
Total hip arthroplasty, 196, 593
Total hip arthroplasty (THA), 393, 605
Total hip replacement, 599
Total hip replacement sockets, 167
Total joint arthroplasty, 415
Total knee joint simulation, 496
Total knee replacement, 282, 741
Toxicity, 238, 537
Translucent shade, 613
Treatment temperature, 238
Tumor necrosis factor-α, 531
Type IV collagen, 108

UHMWPE, 196, 415, 684
Ultra-high molecular weight polyethylene (UHMWPE), 496
Unidirectional solidification, 352
Urethane, 42

Vascular, 308
Vascular graft, 172, 221
Vascularization, 261
Viscoelasticity, 16, 47
VL-cured resin, 42
Voice prostheses, 421
Voice prosthesis, 556

Water vapor transmission, 358
Wear, 570, 673
Wear debris, 196, 282, 406, 415
Wear testing, 496
White shade, 613

X-ray diffraction, 358

Yeast strain, 421
Young's modulus, 694

ZM 230487, 406